

Total No. of Printed Pages: 2

SUBJECT CODE NO:- B-2173
FACULTY OF SCIENCE & TECHNOLOGY
B.Sc. T.Y. (Sem-VI)
Examination November/December- 2022
Electronics Paper- XX (602)
8085 Interfacing-II

[Time: 1:30 Hours]

[Max. Marks:50]

Please check whether you have got the right question paper.

- N.B 1. Attempt all questions
- Q.1 Give any five features of programmable interval timer 8253. What are the names of different modes of operations? Explain three causes of mode 0 operation with timing diagrams. 20
- OR
- Draw the pin diagram of 8253 programmable interval timer. Explain the use of A0 and A1 address lines. Explain the working of 8253 as pulse generator with the help of three cases and timing diagrams. 20
- Q.2 Explain block transfer DMA mode of data transfer with the help of flowchart explain any twelve feature of 8257 DMA controller. 20
- OR
- Write short note (Any four) 20
- 1) 8259 PIC initialization sequence with flowchart.
 - 2) Interfacing diagram of single 8259 PIC with 8085 microprocessor and steps of interrupt operation.
 - 3) Pin diagram of 8259 PIC
 - 4) Format of operational command word OCW2.
 - 5) Pin diagram of 8257 DMA controller
 - 6) Block diagram of 8253 programmable Interval timer.

Q.3 Rewrite the followings by selecting correct answer from given options.

- 1) The 8253 programmable interval timer has _____ counters.
 - a) 3
 - b) 4
 - c) 5
 - d) 6
- 2) The 8253 programmable interval timer has _____ operating modes.
 - a) 4
 - b) 5
 - c) 6
 - d) 8
- 3) The _____ signal is used to enable 8253 programmable interval timer.
 - a) CLK
 - b) \overline{CS}
 - c) \overline{WR}
 - d) RD
- 4) The control word registers of 8253 is of _____ bits
 - a) 6
 - b) 8
 - c) 10
 - d) 16
- 5) The 8257 DMA controller have _____ initialization command words.
 - a) 2
 - b) 3
 - c) 4
 - d) 5
- 6) _____ is input signal of 8257 DMA controller.
 - a) TC
 - b) AEN
 - c) Mark
 - d) Ready
- 7) The 8257 DMA controller has _____ channels.
 - a) 4
 - b) 6
 - c) 8
 - d) 10
- 8) The maximum operating frequency of 8257 DMA controller is _____.
 - a) 250 KHz
 - b) 500 KHz
 - c) 1MHz
 - d) 3MHz
- 9) The 8259-interrupt controller provides _____ liner for interrupt request.
 - a) 5
 - b) 6
 - c) 8
 - d) 10
- 10) _____ pin of 8259 interrupt controller is bidirectional.
 - a) \overline{CS}
 - b) \overline{WR}
 - c) CAS1
 - d) \overline{RD}